DOCUMENT RESUME

ED 032 656 24 EA 002 580

By-Yarborough, William

Demonstration and Research Program for Teaching Young String Players. Final Report.

Wisconsin State Univ., La Crosse.
Spons Agency-Office of Education (DH Washington, D.C. Bureau of Research.
Bureau No-BR-7-E-044
Pub Date Mar 68
Grant-OEG-3-7-070044-2936
Note-44p.
EDRS Price MF-$0.25 HC-$2.30
Descriptors-*Demonstration Programs, Educational Innovation, Eye Hand Coordination, Instructional Programs, *Musical Instruments, *Music Education, *Music Reading, *Music Techniques, Teacher Background

This report explains a system for rapidly training beginning students in the technical aspects of playing a stringed instrument. The program also affords them a well-rounded, basic knowledge of music. A "numerical" method of notation and concentrated muscular exercises greatly speeded the technical learning process. The daily coordination of ear training, sight singing, chamber music, and a wide variety of selected standard music provided the basic musical knowledge. The first 3-week period involved 6 hours of study per day under master teachers in class and rehearsal sessions. The remainder of the year involved weekly private lessons under local string teachers. Progress was outstanding for all students and parental and student excitement proved to be high. During the first 3-week period, the students progressed the equivalent of 6 months to a year of study under ordinary conditions. Subsequent study under private teachers has proven proportionally rapid. A changeover from the numerical notation to the conventional notation was effected with no loss in speed of learning. (Author/DE)

EDO 32656

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

BR -7-E-04
PA 24
OE/BR

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

Final Report

Project No. 7-E-044
Grant No. OEG 3-7-070044-2936

DEMONSTRATION AND RESEARCH PROGRAM FOR TEACHING YOUNG STRING PLAYERS

William Yarborough

Wisconsin State University

La Crosse, Wisconsin

March 1968

The research reported herein was performed pursuant to a Federal Grant with the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgement in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

EA 002 580

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

TABLE OF CONTENTS

	Page
PREFACE AND ACKNOWLEDGMENTS	iii
SUMMARY	4-10
A. Problems	4
B. Scope of Study	4
C. Objectives Pursued	5
D. Hypothesis Tested	7
E. Results	8
F. Findings and Their Significance	9
G. Recommendations	10
BACKGROUND FOR THE STUDY	10-11
METHODS OF APPROACH	11-24
A. Testing the Applicants	11
B. Cooperation of Parents and School Officials	14
C. Faculty for the Project	14
D. Project Schedule	15
E. Conducting the Project Ear and Rhythmic Sessions	16
F. Muscular Control Exercises	20
G. Instrumental Studies	21
H. The System of "Numerical" Notation	24
FINDINGS AND ANALYSIS	29-32
CONCLUSIONS AND RECOMMENDATIONS	32-33
APPENDIX	33-44

PREFACE AND ACKNOWLEDGMENTS

No one man alone can make a contribution of value to the world. Likewise, the results and findings of this research project are made possible through the cooperation of musicians, who have devoted themselves tirelessly to this approach to teaching beginning string players. It is our sincere desire to contribute ideas which will aid the progress of the beginning student. Nothing in teaching is completely new. This approach possesses ingredients of teaching methods used by many outstanding pedagogues. We feel that the assembling of previously-tried techniques, plus new innovations in the approach to the stringed instrument have made this research project worth while and of value to our colleagues.

Credit is well-deserved by the four master teachers, who bore the initial concentrated three-weeks of teaching the twenty-five youngsters selected for the project (from a field of approximately 500 applicants). The master teachers for these three crucial weeks in June of 1967 were: Zigmont G. Gaska, violin; Ruth Coelho, viola; Alice Mays, 'cello; and Donald Martin, bass. Along with these master teachers, two teaching assistants, Terrance Krugel and Richard Loken, provided valuable assistance during daily practice sessions. Following the initial three-week period of class lessons, local string teachers have given unceasingly of their abilities in weekly private lessons for the children. These individual lessons are in the capable hands of Emil Guenther (violins and violas), and Leigh Elder ('cellos and basses).

The parents of all the students should receive special mention, for it is their unwavering encouragement and devotion to their children's efforts and to our attempts to provide a valuable experience for their children that have made the instruction a success.

My wife's belief in the necessity of this experiment and her untiring efforts in behalf of the entire project have given to all of us the energy and desire to make this contribution possible.

William Yarborough

SUMMARY

A. Problems

It is a well known fact that the shortage of professional string players and teachers in America is crucial. (See appendix, page 33 for statements by Leonard Bernstein, George Szell, and Erich Leinsdorf) This is borne out by the shortage of competent string musicians in our major and minor symphony orchestras throughout America, and in the lack of competent string teachers in many of the public schools throughout the Nation.

Too, it is felt that parents too often discourage young people from studying strings because of the unappetizing sounds produced in the early stages of study and the lack of rapid progress.

Therefore, it was felt that there was a need for a new approach to the teaching of beginning strings, which would speed the progress of technique and which would rapidly give the beginner valuable insights into the handling of musical knowledge vitally allied to string technique. Such a new approach would encourage the string student and parent to continue with string study, and would improve the string teaching standards in the public schools.

B. Scope of Study

The new approach to the teaching of stringed instruments is aimed at the beginning student (ages 6-10). The approach includes all four categories of stringed instruments. This approach directs attention to the first six months of study, for this is the crucial time in which the player should acquire his or her basic technique, on which all future performance hinges.

This method concentrates 6 months of normal study into 3 weeks of controlled and intensive learning. The three-week class study closely allies ear training, sight singing, rhythmic exercises, muscular control exercises, a basic understanding of what constitutes musical phrasing, and ensemble playing to the efforts of the teacher in technically training the student on the instrument. All of this training is accomplished through a "numerical" system of notation. After this intensive learning period in class sessions, the student studies privately under a local string teacher, and begins the transition from the "numerical" notation (to be discussed later) to the "conventional" notation.

It is felt that the use of "conventional printed music" is an

encumberance to the beginner. Not only does the beginner have to grapple with the huge problems of fingering and bowing (in very awkward positions), but he must also memorize the names of printed notes and relate them to the instrument.

The purpose of the simple "numerical" notation is to directly relate the string number and finger on the printed page to the string and finger used on the instrument. This eliminates, in the early stages of study, the five-lined staff, note names, time and key signatures, and foreign tempo terms.

Of the 500 youngsters auditioned, 25 between the ages of 6 and 10 from La Crosse were brought to the campus of Wisconsin State University at La Crosse on June 3rd, 1967, to receive three weeks of intensive musical training under master teachers, to be followed by at least one year of private instruction by local teachers.

C. Objectives Pursued

It is felt that there are several facets of musicianship which must be allied immediately, at the start of the beginner's training, to enable him to make the greatest advancement on a stringed instrument in the shortest possible time.

These facets include:

1. A thorough basic understanding of ear training and sight singing (only possible if the child possesses a good ear).
2. Ability to cope with simple and complex rhythms.
3. A physical building of the basic muscles which go into string playing.
4. A coordination between the eye, the mind, and the ear.
5. An understanding of what constitutes a good musical phrase.
6. An understanding of the basics of bow, finger, mind and body control - with the coordination of these areas of control.
7. An understanding of what constitutes a tone of good quality.
8. A musical sympathy for all adjacent instruments (intonation, rhythm and phrasing) when playing in an ensemble.

No scales or arpeggios, per se, were used in the project. The acquisition of technique was the result of the use of melodies from chamber and symphonic works, together with sight singing, muscular control exercises, a certain amount of chamber playing, and recognition of certain works in the standard chamber and orchestral repertoire.

To produce the desired results, two to four students on each of the four instruments constituted a master teacher's class.

Intensive ear training, rhythmic studies and muscular exercises at the beginning of each day were employed during the first three weeks. These ear training, rhythmic and muscular exercises were related to the music to be studied under the master teachers that specific day. All melodies used in both ear training and master teacher's lessons were taken from standard orchestra and chamber music repertoire, and included representative works from all periods of composition.

All of the students were involved in the same ear training, rhythmic and muscular studies simultaneously.

Recordings of standard orchestral and quartet repertoire were played during the lunch period each day. At the end of each day, beginning with the second week, all students were involved in ensemble playing, first in small groups, and then in four-part string orchestras.

Rewards for hard work were considered valuable. As an added daily incentive, a Walt Disney movie was shown at the end of each day for those children who behaved and made progress. Prizes were to be given to the three students who showed the greatest advancement during the three-week period.

To test the effectiveness of the "numerical" notation as opposed to the "conventional" notation for the beginner, one half of the students used the "numerical" notation and the other half, the "conventional" notation.

Speed of playing was related to three colors -- red, yellow and green -- common denominators to everyday actions (stop lights).

Each day of the first three weeks began at 9:00 a.m. and concluded at 3:30 p.m. Each student had his or her private practice

room and was supervised by teaching assistants during scheduled practice periods.

Parents were deeply involved in their children's practice habits, general musical knowledge and technical development.

The project director held sessions with the parents and encouraged the parents to occasionally visit the project when invited by the director. On such occasions, the project director explained each step of the process in the training of the children and each parent was taken to the master teacher's class, the practice rooms, the ear training sessions, and the ensemble rehearsals. Problems relating to specific children were discussed in private between parents and director, and the solutions to these problems were suggested to the parents involved. Each parent was made to feel that he or she was an integral part of the program.

D. Hypothesis Tested.

In connection with the above objectives, it is believed that there must be a direct connection between what the eye sees on the printed pages, what the voice is able to produce as a result of what the eye sees, and the resulting musical sounds produced on the instrument. This calls for a daily relationship between ear training, sight singing and the melodies which are pursued in the master teacher's classroom.

It is further felt that the use of a numerical system of notation which eliminates the problems of note names, note values, time signatures, and key signatures in the beginning stages of study will greatly speed the process of learning, and will enable the teacher to concentrate more upon the physical aspects of instrumental technique.

It is further felt that the beginner must immediately relate his playing to that of others in ensemble playing to train the ear, mind and body.

One more area is considered to be of significance. This area involves the elevation of MUSIC in the mind of each child and in the minds of his or her parents. The competitive spirit in America, it is felt, is part of the answer to the placing of value upon performance on a stringed instrument. But, in addition to this, it

is believed that pride in the ability to master a difficult but essential instrument, vital to our way of life, should be of assistance in bringing about unusually rapid strides and the desire to be a professional musician -- either in the performing or teaching field.

E. Results

At the conclusion of the three-week period, the violinists, violists, 'cellists and bassists studying under the new approach progressed, technically, the equivalent of 6 months to one full year of ordinary study under average classroom study conditions.

Along with the acquisition of good basic technique, each student gained a well-rounded basic musical knowledge in ear training, melodic phrasing, the theory of sound, and ensemble playing.

There also developed an "esprit de corps" among the students which resulted in great pride in ability to master the early steps of string playing. This pride carried over into the feelings of the children's parents, their friends, and the general community.

The consultants from major symphony orchestras, who were brought in to audition each student and the ensembles at the end of the initial three-week period, found the intonation and musical phrasing of the majority of the students amazingly advanced. Comments from these consultants included "tremendous achievement in a very short time", "a model for all other string projects", "of tremendous importance", "the program without a doubt has to be considered of great value", "a most helpful and valid approach to introducing the stringed instruments to young children". (A complete set of these opinions from the consultants may be found in the appendix, page 34 of this report.)

During the three-week period, the students on violin and viola using the "numerical" notation in playing outdistanced those using the "conventional" notation. The "numerical" notation system 'cellists and bassists acquired technique more quickly than those using "conventional" notation, but this was not as pronounced as with the violinists and violists. Future progress (after the initial three weeks) under private teachers has been so pronounced that all of the grammar school students from the project are capable of playing junior high school music after eight months of study.

F. Findings and Their Significance.

The findings proved the following conclusively:

1. All string training should be preceded and continuously allied to ear training, sight singing, and muscular exercises.

2. A child with a good natural "ear" has a good chance for rapid advancement on a stringed instrument.

3. For rapid progress in the beginning stages of study, melodies from standard chamber and orchestral repertoire, rather than scales, arpeggios and technical studies hold the interest of the student and speed progress of adapting to proper intonation.

4. The use of a "numerical" notation, involving simple Roman numericals to indicate string numbers and arabic numerals to indicate finger numbers, together with simple numerals and signs to indicate rhythmic values greatly speed the acquisition of playing ability.

5. The use of recordings of the standard repertoire, which is currently under daily study, is an aid to giving the student an understanding of musical phrases.

6. Performance in ensembles, beginning during the second week of study, gives the students a sense of security in intonation and rhythm and an ability to adjust pitch to surrounding instruments.

7. The change-over from "numerical" notation to "conventional" notation becomes a simple matter for the private teacher after concentrated class study and does not slow the student's progress when gradually incorporated into the private lessons.

8. One intangible requirement for developing a satisfied and happy young string player is the teacher's approach to the every day problems of string playing. The teacher must be open-minded, vital, excited, and positive about music in general. The teacher must possess that undefinable quality which produces happiness out of hard work and satisfaction out of successfully completing a difficult task. This

happiness grows from the excitement created by the teacher. It is a direct result of successfully meeting challenges. The mastery of music on a stringed instrument must be a happy affair from the very first day.

G. Recommendations

To be successful, a string teacher should be a performer on a stringed instrument. It is only through a complete understanding of the instrument (preferably from childhood) that a teacher can be competent enough to produce adequate results with children.

Further, it is preferable for a string teacher in the public schools to concentrate his or her energies in the direction of one of the four categories of string instruments, rather than teaching all four categories. This concentration upon one instrument serves two purposes:

a. The teacher is better acquainted with the many problems involved in a particular instrument.

b. The training of the students under the one teacher is a continuous process involving one approach, rather than several different approaches.

BACKGROUND FOR THE STUDY

A great need exists for the development of good professional string players in America.

The many yearly requests from superintendents of schools for competent string teachers attest to the need for a method of teaching strings which is comprehensive and successful. Such a method should enable the child to rapidly advance on his or her instrument

from the very beginning of the learning process.

Though many outstanding approaches result in fine technique after a number of years, many potentially good string students still fall by the wayside because of the discouragements of early string training.

In some foreign countries, the answer is parental authority. The parent demands tedious practice and progress. Otherwise, the child is severely disciplined. In America, however, children are allowed much more freedom in decision-making, and the impetus must come from either the teacher, or the method of training, or both.

The methods of approach in this system are designed to do the following:

1. Develop a rapid technical learning process, in which the child becomes excited with the progress he is making.

2. Aid the teacher in training the child's ears, eyes, mind, and muscular coordination at the same time as the technical learning process is taking place.

3. Encourage the parents through the child's rapid learning process and give the parents an active part in the child's musical development through the use of specified recordings related to the child's work and through meetings with the teacher and other parents who have children at the same stage of development as theirs.

METHODS OF APPROACH

A. Testing the Applicants

To find the children who were best suited to the string project, applications and letters to parents were distributed to all gramma

schools in the La Crosse area. (See appendix, page 35 for copy of letter sent to parents.) It was felt that the youngsters selected should be area residents, so that these students could continue with weekly private lessons under local teachers, under the supervision of the project director, after the initial concentrated three-week period under the master teachers in June of 1967. Children were to be between the ages of 6 and 10, and were to have no previous musical experience.

Approximately 500 applications poured in from parents, representing the widest range of professions possible. Each parent was given a specific time during which his or her child would be tested at Wisconsin State University in April of 1967. Each parent was required to agree in writing that if his child was selected for the project, the child's string instrument lessons would continue for at least one year after the initial three-week training period, at the parent's expense.

Between two and three weeks were required to complete the testing of the children. Two teaching assistants assisted the project director in the testing process. The assistants eliminated all of those children whose pitch discrimination was completely incompatible with string playing.

The remainder of the applicants individually visited the office of the project director. In the quietness of the director's office, each youngster was put at ease. This was done by talking of the child's favorite T.V. programs and movies, by throwing a soft rubber ball back and forth, by singing simple songs with the child, and generally by talking of the child's likes and dislikes.

Much was discovered in this informal session. One relaxed child would comment that she "hated music", but that "mother said she must be chosen for the project". Another admitted that he was promised a guitar if he "stayed with it" (the project). Still another really loved the "sound of the 'cello" and wanted to learn to play. One broke into tears when asked to join the director in singing "America". A former school teacher had laughed at his singing. One boy said his older brother played violin and he wanted to "play better than his brother".

These "talk sessions" revealed that a few children were being forced by their parent(s) to take up a stringed instrument, but the vast majority really had a desire to study a stringed instrument.

METHODS OF APPROACH (cont'd)

Conversation gave the director an accurate picture of the general intelligence of the child and the patience of the individual -- two essential factors.

After a genuine communication had been established between child and director, the ear and rhythmic abilities and muscular coordination were investigated.

For ear testing, a note would be played on the piano, followed by another note. The child would state whether the second note was "higher" or "lower" than the first. These note relationships were used in lower, middle and upper registers. It was noted that those children exhibiting better hearing in lower registers would be "possible 'cello or bass students" and those hearing higher pitches with more accuracy, "violin or viola possibilities". After several repetitions of this test, the child was asked to sing a simple song ("America", "Home on the Range", "Do-Re-Mi", "Row, Row, Row Your Boat") starting on a specified tone. The director helped with the singing when needed.

Rhythmic tests followed. A short rhythmic pattern was clapped by the director, to be repeated by the child being auditioned. Gradually longer patterns were used to test the child's retentiveness.

Muscular control exercises consisted of "patting the head and rubbing the stomach", "climbing" a dowel rod with the fingers of the right and left hands, moving the left arm up to the chin while moving the right arm at a right angle across the body, moving the left arm up and down parallel to the body and the right arm at a right angle to the body, and others.

One absolute necessity was apparent from the beginning of the plans for the project. To effectively test the "numerical" notation vs. the "conventional" notation, no child should have been able to read music. Some, however, firmly stated that they could not read a note of music (probably at the prompting of an ambitious parent!). But when the auditioner placed a simple melody line on the piano rack and off-handedly requested that the child play the melody, a few could! These children were eliminated to control the conditions of the experiment.

Applicants selected were chosen on the basis of the following criteria:

a. Good ear abilities.

b. Good general intelligence.

c. A real desire to play a stringed instrument.

d. A certain amount of rhythmic and muscular aptitude.

e. Ability to concentrate and follow certain simple instructions accurately.

B. Cooperation of Parents and School Officials.

Amazingly, every parent of the children chosen has been completely cooperative with the demands of the project. This, I believe, points up the value of a selective system for string students, in which both child and parents feel that the privilege of studying is for the few who are talented. Mass teaching of youngsters with "tin ears" is a waste of the time and energies of both the teacher and students.

Cooperation from public school officials was evident when the superintendent of schools excused those children chosen for the project a week before the close of the public schools to join the project. Public school string teachers agreed to teach the 25 children selected on a once-a-week basis after the three-week training period was completed. The same techniques of instruction used during the three-week period were continued by these teachers from the schools.

C. Faculty for the Project.

Faculty selected for the three-week period in June consisted of professional musicians, who had also dealt with the teaching profession with great success. Each was a fine performer and each had the makeup and desire to contribute his or her talents to the fullest degree. Each of these master teachers had voluminous correspondence with the project director as to the methods of approach during the project and offered suggestions. Before the start of the project, the master teachers and director had meetings to discuss each facet of the teaching process. Also, during the project, the faculty met for an hour daily in open discussion concerning the curriculum and the personalities of the students.

METHODS OF APPROACH (cont'd)

D. Project Schedule.

The daily schedule adopted for the three-week period in June of 1967 (six days per week) was as follows:

9:00 - 9:30 a.m.	- Ear training, sight singing and muscular control exercises - entire student body. (25 students)
9:30 - 10:15 a.m.	- Class lessons by master teachers for the one-half of student body studying under "conventional" notation". (2 to 4 students per class)
9:30 - 10:15 a.m.	- Individual practice sessions for the other half of the student body studying under the system of "numerical" notation. These practice sessions were supervised by trained teaching assistants.
10:15 - 11:00 a.m.	- Class lessons by master teachers for the one half of student body studying under "numerical" notation. (2 to 4 students per class)
10:15 - 11:00 a.m.	- Individual practice sessions for the other half of the student body studying under the system of "conventional" notation. These practice sessions were supervised by trained teaching assistants.
11:00 - 11:45 a.m.	- Play period -- entire student body, supervised by teaching assistants.
11:00 - 12:00 p.m.	- Meeting of faculty staff.
11:45 - 12:30 p.m.	- Lunch period -- students.
12:00 - 1:00 p.m.	- Lunch period -- faculty.
12:30 - 1:00 p.m.	- Rest period - students.
1:00 - 1:45 p.m.	- Class lessons by master teachers for the one half of student body studying under "numerical" notation.
1:00 - 1:45 p.m.	- Individual practice sessions for the other half of the student body studying under the

"conventional" notation. These practice sessions were supervised by trained teaching assistants.

1:45 - 2:30 p.m. - Class lessons by master teachers for the one half of student body studying under "conventional" notation.

1:45 - 2:30 p.m. - Individual practice sessions for the other half of the student body studying under "numerical" notation. These practice sessions were supervised by trained teaching assistants.

2:30 - 3:00 p.m. - Ensemble groups.

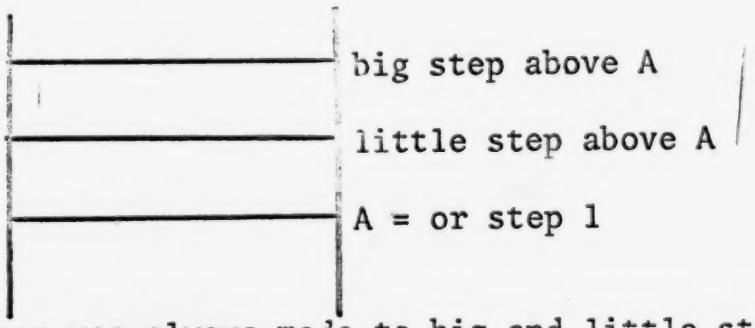
3:00 - 3:30 p.m. - Movie.

E. Conducting the Project Ear and Rhythmic Sessions.

All of the project students were simultaneously involved at 9:00 a.m. each morning (including Saturdays) in intensive ear and rhythmic exercises for the three-week period in June 1967.

The ear training and sight singing began with memorizing the accurate A (440) pitch, and being able to sing the pitch whenever called upon to do so during the day by any faculty member. After A had been "matched" vocally by all of the children, this A was designated on the blackboard as the first "step" of the ladder.

Example:

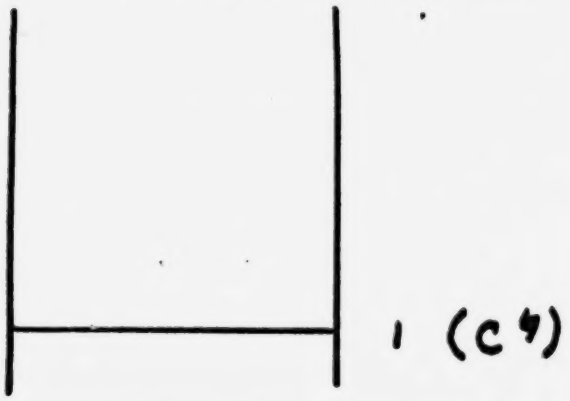


Then reference was always made to big and little steps -- never to "whole tones" and semitones. The instructor sang a big step above A. The children repeated. The instructor sang a little step above A. The children reiterated. This process was repeated a number of times to firmly establish the difference between big and little steps. At no point after first mentioning the letter A was another note name mentioned in the ear sessions - only numbers.

METHODS OF APPROACH (cont'd)

After A was established, the children were asked to sing up the ladder a big step and a little step above A (i.e. C natural). This note (C natural) was dropped one octave by the instructor and then became the new step 1 of the ladder (better vocal range).

Example:



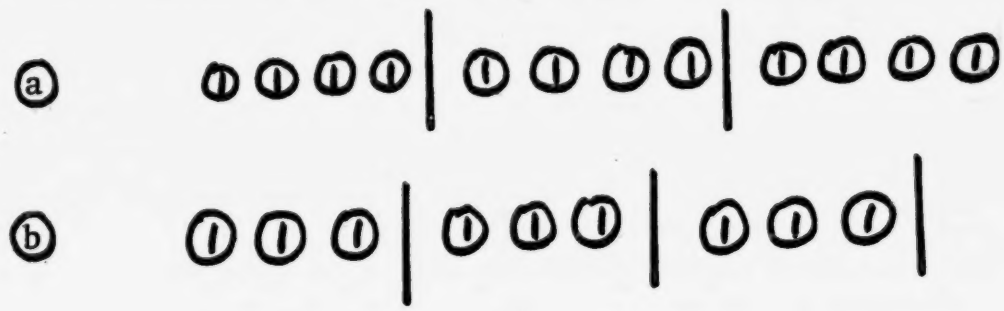
From step 1, the youngsters sang big and little steps above, sometimes changing step 1 to a d or an e (movable "do").

After stepwise progressions were established, skips were begun. This took the form of skipping from step 1 to big step 3, from step 1 to little step 3, from 1 to 5, from 1 to 4, from 1 to 8, etc.

These above ear processes consumed approximately 15 minutes of each session for the first three or four days. Children were asked to sing together (all 25), then in groups of 4 or 5, then individually (with instructor, if necessary).

Rhythm

Rhythm was treated separately, at first, with the ① beat (or the quarter note) as the basic unit. A pattern of beats was written on the blackboard. The children were told to "push" or "accent" the first note after each "up and down line". Thus:



Then the ① "apple" was cut in half, and the result equalled

two ⓧⓧ (pieces) for each ① . This was clapped, thus (eighth notes):

ⓐ ⊗⊗⊗⊗⊗⊗⊗⊗ | ⊗⊗⊗⊗⊗⊗⊗⊗ |

OR

ⓑ ⊗⊗⊗⊗⊗⊗ | ⊗⊗⊗⊗⊗⊗ |

Then one half of the class clapped 4 beats in ① s, while the other half clapped 4 beats in ⓧ s (or 2 claps to every 1 clap of the first half of the class).

Then half of the class clapped ① s while the other half clapped ② s (half notes), after which one half tapped out ① s while the other half tapped out ④ s (whole notes). Careful mention was made of the difference between the <u>length</u> of the ② s and the ⓧ s when the class clapped twos against ones.

The entire rhythmic "notational" system was as follows:

The basic unit of rhythm for the beginning ear training sessions was the quarter note, referred to as ① beat. A half note or a half rest was spoken of as ② beats. A whole note or whole rest was ④ beats. Eighth notes were 1/2 the value of ① beat and were indicated by use of an Ⓧ ; and the sixteenth note (1/4 beat) equalled ⊙ . Thus the dotted eighth was designated as Ⓧ. .

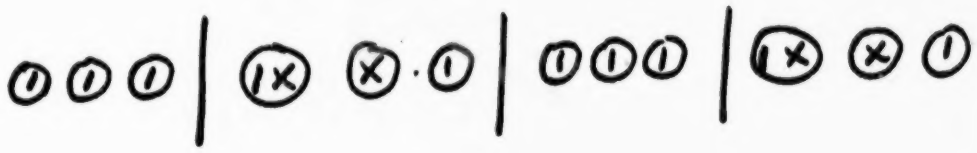
No note value was referred to as an eighth note, a quarter note, a half note, or a whole note -- rather "each note receives (so many) beats".

Melodies

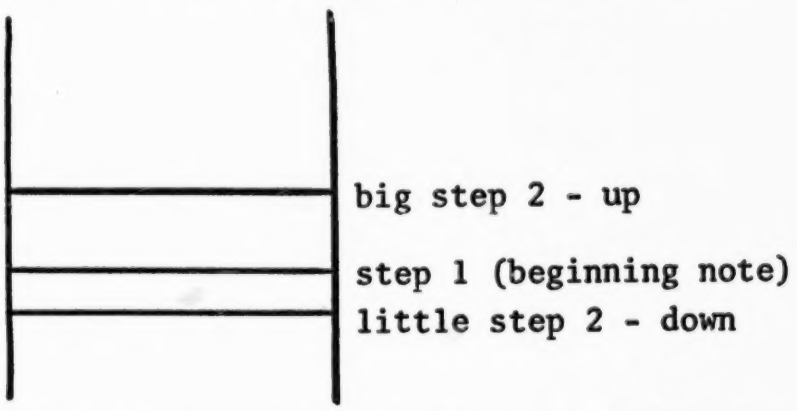
Melodies were then begun, with each melody sung by the instructor from a <u>given</u> <u>pitch</u> and then vocally copied by the students ("America", "Do-Re-Me", etc.). Gradually longer melodies were employed, and the children vocally copied these melodies individually and collectively. The piano was avoided as much as possible as the supporting instrument. <u>Thinking</u> pitches was required, and the children were stopped at points to indicate whether the step was big or little, and how many little and big steps were involved between two notes.

METHODS OF APPROACH (cont'd)

Rhythm was written on the blackboard for each composition, for example:

America 

The steps of the melody were written on the ladder thus:



Then the melodic steps and the rhythm were joined for the final product. Thus the students thoroughly understood the rhythmic and melodic structure.

During this melodic singing process, a "musical sentence" was discussed, and an explanation of what constitutes a musical phrase ("breathe after each phrase") was clarified.

These musical sentences were performed in different manners. For example, one section of the class began a melody, and the remainder of the class completed the singing of the melody when the instructor so indicated.

Later (second week), two-part harmony was introduced, with melodies and harmonic structure taken from the classics [i.e. -- themes of the Schubert "Unfinished Symphony", the Brahms "First Symphony" (last movement), the second movement of Haydn's "Emperor Quartet".] Usually the instructor would sing one part with a section of the class, and a teaching assistant would sing the second part with the second group of students.

During the third week, individuals, as well as groups of students, participated in part singing. Good intonation was especially stressed.

Again, recordings of the works employed in the ear training sessions and class lessons were played during the lunch periods and by the parents at home. Occasionally the faculty quartet gave short performances at the end of a day for parents and students, and the value of "live" performances was emphasized to students and parents.

F. Muscular Control Exercises.

The final ten minutes of the ear training sessions were devoted to muscular strengthening and control. These exercises were found to be extremely helpful in the master teacher's lessons and saved hours of work which would have been required in addition to the teaching of basic technique.

The teaching assistant, who taught this portion of the studies, began with the use of red balls fitted to the hands of each child. The balls were squeezed rhythmically in one hand and then the other.

Following this, a dowel rod was handed to each child, cut to the length of a violin bow, to perform the following exercises under the instructor's supervision:

1. Finger climbing exercise -- up and down the rod to achieve strength and dexterity.

2. "Windshield Wiper" exercise -- a left and right movement of the dowel rod, the hand holding one end of the stick. This achieved a limber wrist action for the bow arm.

3. The rowing exercise. While holding the stick at one end (with the hand placed on the rod as it would be placed on the bow) the child pretended that he or she was rowing a boat, thus relaxing and strengthening the shoulder and arm muscles.

4. The "Willy Lump Lump" exercise. The child drops both arms in front of the body, bending from the waist and dangling the arms freely. This helps to overcome the biggest problem in teaching beginners -- TENSION.

G. Instrumental Studies.

Class lessons under the master teachers first dealt with the proper removal of instrument and bow from case. The value of each instrument was impressed upon the students, with the result that only one instrument was damaged during the project period. The carrying of each instrument, especially the 'cellos and basses, was dealt with.

Technically, emphasis was first placed upon the handling of the bow and bow control. A ball was placed in each student's right hand. The student was asked to hold the ball, relaxed, with the palm up. Then the right hand was turned with the palm facing down and the rubber ball was dropped to the floor. Each student was told to hold this hand position and the frog of the bow was placed in each student's hand. This resulted in the proper position for the bow hand, with less distance between the second and third fingers than between first and second, or third and fourth. The resulting thumb position was not too far under the stick, but supporting the weight of the bow.

Tension was omnipresent and the teacher was forced to try many methods of relaxing the overall body tensions of the students. (See "muscular control exercises", p. 20)

Bow control studies were begun by moving the bow straight up and down at the waist height, in a slow manner, parallel to the right leg of the body. Then, bow movements were executed to right angles to the student's body in front of the abdomen area. Teachers counted a slow ten for each complete up and down movement of the bow. This bow control was drilled into the students until a reasonable amount of patience had been developed.

Now instrument and bow joined one another. The position for the left hand was approached in the same manner as the position for the right hand. A soft rubber ball was placed in the left hand, palm up. The hand was turned over, the ball was dropped, and the hand was placed around the neck of the instrument, while the teacher held the instrument in the correct position for the student.

Correct positions for instrument and bow were constantly stressed, though slight deveations from the norm were necessary depending on the physical structure of each child. Violinists and

violists were required to hold their instruments under their necks without the aid of the left hand to strengthen the neck muscles. The usual left elbow far under the instrument, the flat wrist for the left arm, the curved fingers for both right and left hands, the straight up and down bow, and the elbow fairly high on the bow arm were emphasized. For the 'cellists and bassists, the high elbows on both arms ("puppets arms are lifted by strings"), the curved fingers on both hands, the loose wrist on the bow arm, correct sitting and standing positions, and the problem of the sliding of the instrument on a slick floor were approached.

Next came the approach to tuning the instrument. The majority of the teachers preferred to tune the A string for the child (during the first week) with the aid of the child. The teacher would adjust the string up or down and the student would tell the teacher when the correct A pitch was reached. This again impressed the A-440 on each student in the class.

Tuning completed -- which was handled in a very rapid manner so that the children's attention would not lag -- the correct bow pressure on the A string was approached.

Immediately following the playing of the open A by all of the students in the master teacher's class, all of the children were asked to sing a big step above this note. Then the children attempted to place their first finger on the A string at a point which would imitate the intonation of this note which had just been sung.

SINGING NOTES OF MELODIES ALWAYS PRECEDED THE PLAYING OF THESE NOTES OR MELODIES.

This singing process was the quickest possible method of achieving proper intonation. Several methods were tried at the ensemble sessions as well as in the classroom. The master teacher or the faculty quartet played a melody or harmony and asked the children to imitate their intonation. This was of very little help. The faculty member or members sang a melody, to be imitated by the children on their instruments. This was proven unsuccessful. But when the child, or children, sang the particular melody in tune, and then played it, the results were gratifying.

In teaching first position fingering, the big step-little step method of finding the notes was employed. No mention was made of positions or note names. Note values, however, were stressed in keeping with the procedures followed in the morning ear training sessions.

METHODS OF APPROACH (cont'd)

Several teachers used the "aerial ride" game of demonstrating correct movement from what we know as the first position to higher positions. This consisted of simply moving the 1st, 2nd or 3rd fingers from a first position note to any higher sound on that particular string. No particular note was aimed for. The purpose was to give the child an opportunity to understand the flexibility of the left arm necessary to moving upwards on the instrument. Obviously, the correct wrist and elbow position, especially on the violins and violas, were stressed.

During the master teacher's lessons, concentration became an all important problem with certain children. There is no pat solution to overcoming this dilemma. As was mentioned before, the personality of each teacher must come into play and different students require different approaches. One viola student who could not concentrate beyond a 10-minute span at first, was sent back to his room whenever the teacher felt his attention was lagging. The teaching assistant then took the child in hand and intermittently played games and worked on the instrument with him. Gradually the child's span of attention increased. A bass student broke into tears every day for the first week when he was unable to reach the correct note on his instrument with the fourth finger. Confidence was built into this student through a quiet and understanding teacher who praised every successful attempt by the individual. Some students had to be reprimanded by the teacher or teaching assistant for lack of concentration when it was a well-known fact that the pupil had good concentrating potential.

Failure to produce results according to the master teacher's standards (which were very realistic) caused the student to lose his movie and play privileges for the day.

Teaching assistants were thoroughly trained by the project director as to the approach to each child and as to the method of handling problems in the practice rooms. Both young men were highly dedicated to the purpose of the project and gave of themselves completely. As a result, a fine coordination existed between the work of the project director, the master teachers and the teaching assistants.

During faculty sessions each day, each faculty member expressed himself freely concerning the technical and personal approaches to the students. Each faculty member and the project director learned much from these sessions. For example, foot diagrams on the floor were attempted in order to quickly adjust each student's posture to the proper standing or sitting position. These were found to be

totally impractical because of the different physical makeup of each child. The use of colored lights was discussed as a possibility to achieve automatic reflex from a student as to his intonation and rhythm. This idea was also discarded.

On the other hand, the suggestion of one teacher to use the dowel rod preceding the use of the bow (for position only) saved the project from many broken bows. One teacher's discovery of a liquid roisin to be used on bow hair aided tremendously in better tone production at the beginning stages. Too, this liquid roisin required no roisining of the bows during the entire three-week project period because of its lasting quality. (See appendix, page 36 for information regarding this liquid roisin.)

H. The System of Numerical Notation.

1. The Rhythm.

The "numerical" system of notation for beginners is designed to cover the first six months of study, after which a gradual evolution takes place to "conventional" notation. As was stated in the "Introductory Remarks", these signs and numbers are designed to simplify the reading of music so that the novice has an opportunity to rapidly develop a basic technique. Though occasional movement to other positions occurs in the "numerical" system, this method places the majority of the emphasis on 1st position.

The "numerical" system works as follows:

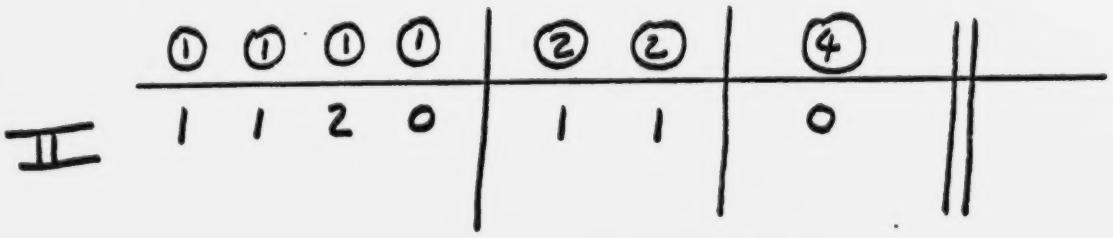
There are:

No clefs

No key signatures

No time signatures

Notation comprises two lines of numbers, thus:



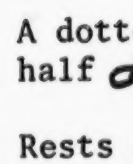
METHODS OF APPROACH (cont'd)

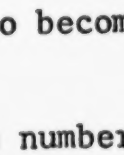
1. The top line of circled numbers indicates the beats within the measure, the quarter note being the basic beat. The ① above, therefore, would be a quarter note; the ②, a half note; and the ④, a whole note.

2. When beats smaller than the quarter note are used, they are shown in the top line as follows:

3. A dotted quarter ♩. translates to become ①⑧; and a dotted half 𝅗𝅥., simply ③.

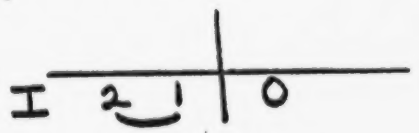
4. Rests are indicated by the same number of beats as are found in a similar note value, with a diagonal line on the lower line (the finger line), thus:

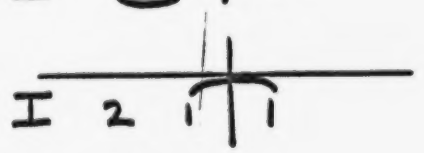
 a quarter rest

 a half rest (2 counts)

an eighth rest

a sixteenth rest

5. A slur is placed below two numbers: 

6. A tie is placed above two numbers: 

7. Accents occur immediately after the bar line.

2. The Melody.

In the second line of notation -- the melody line -- the Roman numeral refers to the string and the arabic numeral to the finger which is to be placed on that string. The entire approach is predicated upon the relationship between half and whole steps as its basic formula.

Therefore, we use a -4, for example, for the 4th finger on the A string on the violin or viola, because of the relationship of E to the preceding open string A. This relationship is a 3-1/2 tone, rather than a full four-tone relationship to the open string. All arabic numerals relate to the preceding open string in all of the "numerical" notation. The use of the minus and plus preceding the finger number differs with the particular instrument (violin, viola, 'cello or bass).

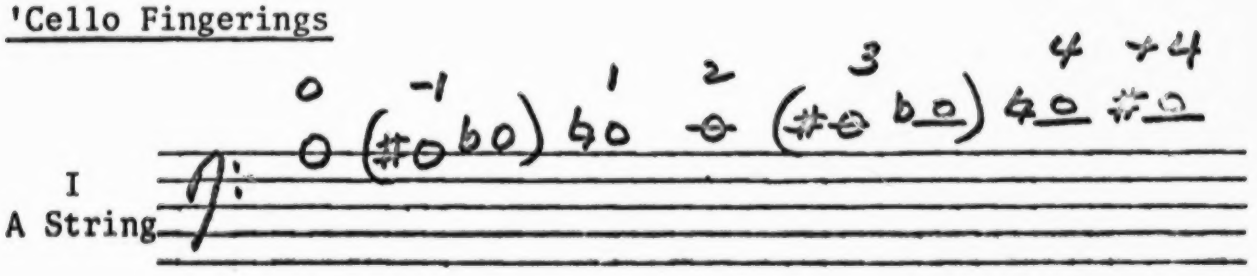
Charts for the fingerings used on each instrument follow:

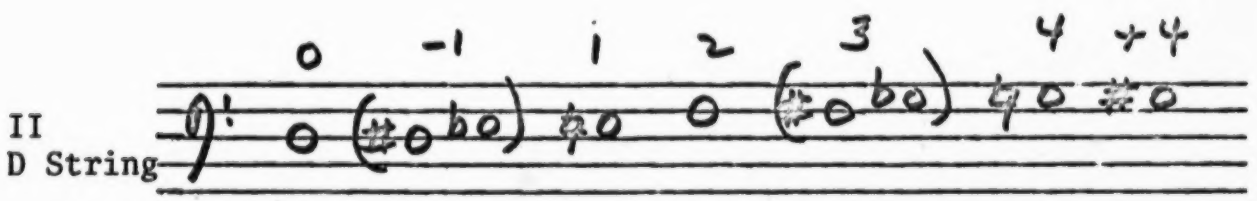
Violin Fingerings

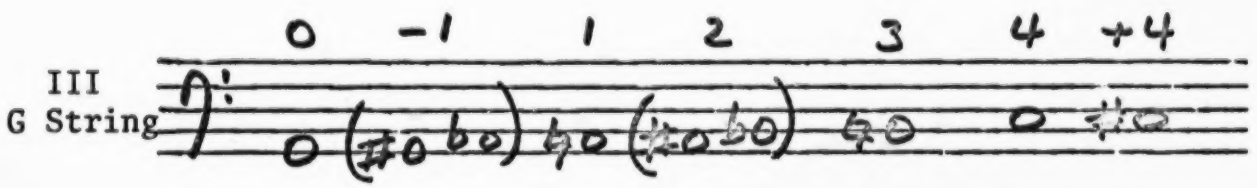
Viola Fingerings

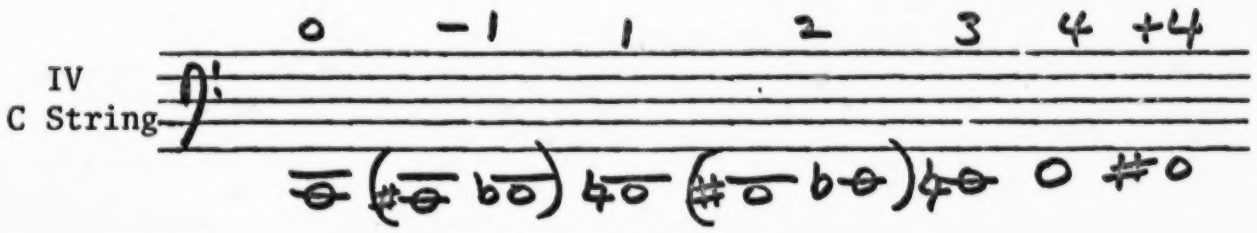
METHODS OF APPROACH (cont'd)

'Cello Fingerings



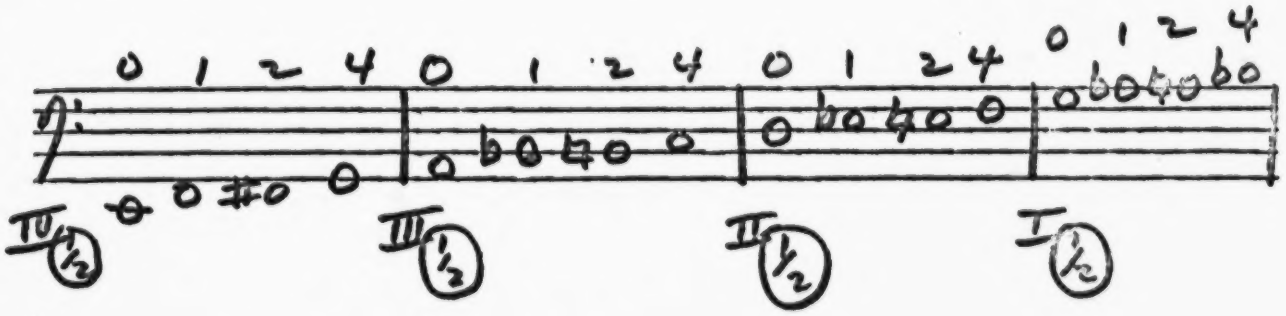






Bass Fingerings

Fingering for the half position is:



Again, we emphasize, all fingerings are related to the preceding open string, and all melodies should be sung before being played.

It is the responsibility of the teacher to make certain that the phrasing of each melody is clear and that students do not simply play a series of notes with no meaning.

The tempo of each melody is indicated by colors. A yellow color indicates that the tempo approaches the average relaxed walking speed of a person. A "red light" (red crayon marking) reveals a speed slower than yellow, and a green line describes a tempo faster than yellow.

(Examples of music using "numerical" notations may be found in the appendix, page 36).

Single bows -- using plenty of bow -- were used in the melodies at first. Later, two or three notes were joined as slurs. Slurring was difficult for the beginning student, but again, singing the melody, while using the proper slurs vocally greatly aided in the playing of the slurs.

FINDINGS AND ANALYSIS

1. Finding - The most successful teachers are those who are, or have been, professional performers on stringed instruments.

Analysis - Master teachers must completely understand the playing of a stringed instrument, and to do so, must start their training at an early age. Even the most competent string artists will admit that there are facets of playing that are even difficult for them to master. Therefore, to provide the best string teaching, the pedagogue must be a master of a stringed instrument.

This does not mean that every professional performer is a good teacher. Far from it! But a good teacher must be a highly competent performer.

2. Finding - The most propitious age at which to begin string training is the earliest possible age. In this project, 6-10 were the age limits. Project faculty recommendations called for pre-school age beginners, if possible.

Analysis - Young children's muscles and thinking processes can be easily molded. The older a person grows, the more set the muscles become and the less pliable the mind becomes to the teaching techniques of the pedagogue. The child who won first place for progress after the three week initial period was a 7-year old boy. This decision was made by the four consultants, who auditioned all of the children at the end of the three-week period. The consultants were first-chair artists from major symphony orchestras and a major string quartet.

3. Finding - Ear training and sight singing is a "must" for all string players.

Analysis - To become a competent string instrumentalist, a person must relate the printed notes to pitches which he or she hears in the "mind" before these pitches can become accurate realities on the instrument. "See, think, hear, play" -- these four words were constantly in the vocabularies of students and teachers alike. When the student can sing a melody accurately, he can, with concentration, play the melody accurately.

4. Finding - A child should be carefully measured as to the proper "fit" of the instrument for best results.

Analysis - Each child was carefully measured for instrument size (1/2, 3/4 size violins and violas, etc.) before the instruction began, and technical development was enhanced by the comfort of the instrument.

5. Finding - The quality of the instrument enhanced the tone quality obtained by these students and encouraged both the teachers and students in their daily work.

FINDINGS AND ANALYSIS (cont'd)

Analysis - A good hand-made instrument speeds the technical development of a student, for it produces quality tones which are pleasing to the student's ears.

6. Finding - The "numerical" notation is a rapid method of teaching strings at the beginning stages. Especially is this true on the violins and violas. All factors considered, the "numerical" notation speeds early learning over the "conventional" notation, both in class lessons and in ensemble playing.

Analysis - The problems of early technique are enormous to the beginning student. Simplifying the notational aspect of string playing is of inestimable help in developing rapid playing abilities and better intonation.

7. Finding - All of the project students were happy children, thoroughly enjoying their work and anxious to take instruments home to practice after the 3:30 p.m. hour during the initial three-week period. (No child was permitted to take his or her instrument home during the first three weeks in order to contrast all practice conditions.)

Analysis - The personality, drive, and empathy between teacher and child was established by the teacher. Happiness was the result of conditions surrounding the entire project and was directly the result of faculty and parental attitudes.

Hard work and discipline of mind and body is the answer to successful accomplishment on a stringed instrument, provided the child has a good ear and talent. The result of this hard work and discipline is successful performance which gives the student prestige over other children. This results in excited children and parents.

8. Finding - Coordination of the left and right arms and hands of the children were no great problem for the project teachers.

Analysis - The use of muscular coordination exercises at the beginning of each day, together with the use of the instrument and bow together from the very first lesson speeded muscular coordination requirements.

Also, muscle fatigue was conspicuously absent from most of the youngsters in spite of the many lesson and practice hours in the daily schedule. This was attributed to the muscular exercises and children excited by music.

9. Finding - Applicant children and parents were anxious to become a part of the research project as evidenced by the large number of applications.

Analysis - Selectivity is the answer to increasing the number of string students. It is only when each youngster and parent involved in string music becomes proud of the fact that he or she has been selected (not begged) to play a stringed instrument that the teacher can have the full cooperation and enthusiasm of the child and parent. (See quotes from letters of project children's parents in appendix, page 40.)

CONCLUSIONS AND RECOMMENDATIONS

The experimental project for beginning strings proved conclusively that the following teaching practices are of value in the rapid technical and musical advancement of beginning string students:

1. Only those children who possess a good "ear" and good basic intelligence should be permitted to spend time in studying strings.

2. Simplicity is the key to maintaining interest and progress. This simplicity takes the form of the "numerical" notation in the early stages of training and the vivid but simple explanations of technical and physical requirements by the teacher.

3. The attitudes and cooperation between teacher and parents are of the utmost essence in correlating the child's practice and musical listening habits.

CONCLUSIONS AND RECOMMENDATIONS (cont'd)

4. Training the ear and the mind are as important as training the bodily activities related to string playing.

5. Singing must always precede playing for the beginning student.

6. The use of melodies from standard chamber and orchestral repertoire holds the interest of the beginning student and develops a listening knowledge of the phrasing and general make-up of the literature heard.

7. The change-over from the "numerical" notation to the "conventional" notation should take place around the sixth month of study. (See appendix, page 42.)

APPENDIX

Page 4 - Need for String Players in America.

". . . the situation in America regarding the existence and availability for competent string players is nothing short of desperate."

George Szell
Musical Director
The Cleveland Orchestra

"There is a great need for excellent string players in the major orchestras of our country. . . . instruction which can be given to aspiring young musicians will be of great benefit both to these young people and to music in general."

Erich Leinsdorf
Music Director
Boston Symphony Orchestra

"There is a vital need for string players throughout the Country. Every encouragement should be given. . ."

Leonard Bernstein
Music Director
New York Philharmonic

Page 8 - Consultants' Reports.

Consultants' comments concerning progress of project students after auditioning each student (after initial three-week period):

"The string project fot the past three weeks showed tremendous achievement in a very short time, and I must congratulate all the persons who carried out the program so successfully.

"This string project under the leadership of Maestro William Yarborough, is just what we needed to develop strings and I hope this will be a model for all other string projects with much longer periods to come yet."

Won Mo Kim
First Violin
Pro Arte Quartet

"Very worthy undertaking -- I hope it continues as it stimulates students. The fact of having daily lessons under close supervision eliminates the chances of accumulating faults to a tremendous degree.

"These three weeks spent with these students is certainly of tremendous importance, especially in the very start of their training. A fine experiment."

Nathan Gordon
Principal Viola
Detroit Symphony

"This program without a doubt has to be considered of great value.

"One of the strong points here was the opportunity for these young people to get a concentrated start with good teachers.

"The important point must be that these young folks have had a vital and concentrated learning experience that will show its true value in continuation."

Lowell Creitz
'Cellist
Pro Arte Quartet

"I found the La Crosse State University String Project a most helpful and valid approach to introducing the string instruments to young children. The amount of progress in the three-week period of concentrated work with these beginners was indeed impressive. Our young children, (at this age, almost all of which are talented and responsive) need more opportunities of this nature to give them a head start in the world of symphonic music.

"Bravo, the more exposure the better!"

Joseph Guastafeste
Principal Bass
Chicago Symphony

Page 12 - Letter to parents regarding application for String Project.

"Several articles have appeared in the La Crosse Tribune regarding the Federal Grant which has been given to La Crosse State University, to conduct a research program with a new method of string instrument teaching.

"Twenty four children will be chosen from those who make application. These children should be six to ten years of age, have had no previous instruction on any musical instrument, but show a definite interest in music.

"Teachers for the research institute will be outstanding string teachers and professional musicians from the St. Louis Symphony, the Chicago Symphony and the Detroit Symphony. This instruction is without charge to the student, because of the grant.

"The training period between June 5 and June 25 includes the hours 9:00 a.m. to 3:30 p.m. Monday through Saturday. All instruments will be furnished. There is no enrollment charge. The noon lunches must be furnished by the parent. All parents must agree to assume the responsibility of seeing that his or her child is transported to and from the school and that he or she maintains perfect attendance.

"If you are interested in having your child auditioned (ear tests, muscular coordination tests, etc.), please obtain an application from the principal of your school and return it to his office before April 20th. Audition times will be arranged.

"This is a rare opportunity for the young people of La Crosse who are selected.

Sincerely,

William Yarborough
String Project Director

P. S. If you decide to make application for your child, be sure to sign the agreement at the bottom of the application blank.*

*Re: continuation of private instruction under private teachers at parent's expense."

(Refer to appendix, page 36-A for sample of APPLICATION.)

Page 24

For information regarding the use of liquid roisin on bows, one may contact Mr. Zigmont G. Gaska
2030 Parkview
South Bend, Indiana

Page 29 - Examples of "Conventional" and related "Numerical" notation.

A. Conventional notation for BROTHER JACK (violin).

APPLICATION FOR STRING PROJECT

Wisconsin State University
William Yarborough, String Project Director
June 5 through 25, 1967

Name _____

Address _____

Telephone _____ Age _____ Sex _____ Grade _____

Name of Parent or Guardian _____

Address _____

Parent's Occupation _____

Any Past Musical Experience? _____

If so, what? _____

* * * * * * * * * * *

AUDITION

TO BE FILLED OUT BY PROJECT DIRECTOR.

1. Ear ability: _____
2. Rhythmic ability: _____
3. General Intelligence: _____
4. Muscular coordination: _____
5. Physical strength: _____
6. Patience and concentration: _____
7. Musical apptitude: _____
8. Arm length: _____
9. Height: _____

* * * * * * * * * * *

AGREEMENT OF PARENT OR GUARDIAN

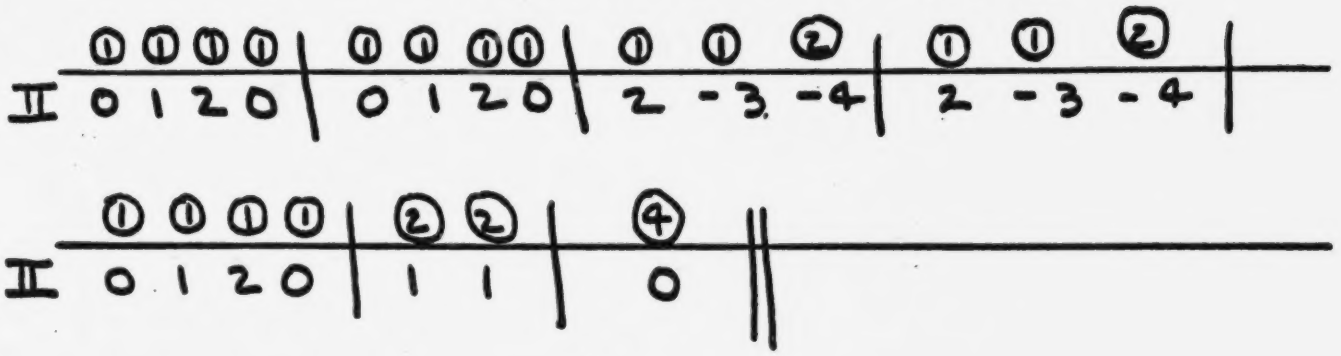
As parent or guardian of the above named child, I will agree to abide by the rules of the string project faculty during the project period, and will give my child at least one additional year of private training on the instrument which the project director selects for the child, if my child is included in the project. Also, if my child is included in the project, he or she cannot withdraw until the project is completed, other than serious illness.

_____
Signature

APPLICATION DEADLINE, APRIL 20, 1967. Return application to principal's office.

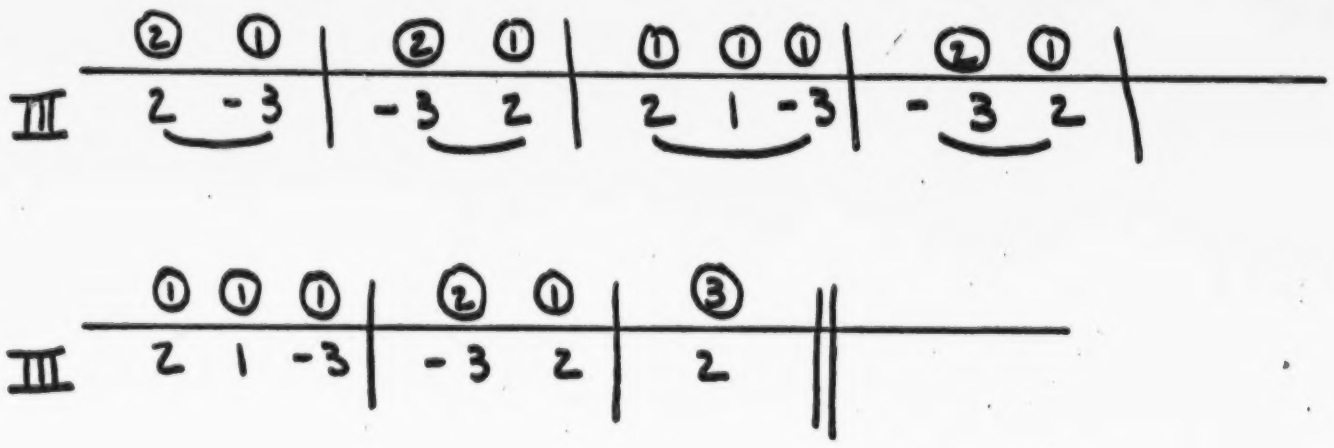
NOTE: Parent will be notified of time of audition for applicant.

Numerical Notation for BROTHER JACK (violin).



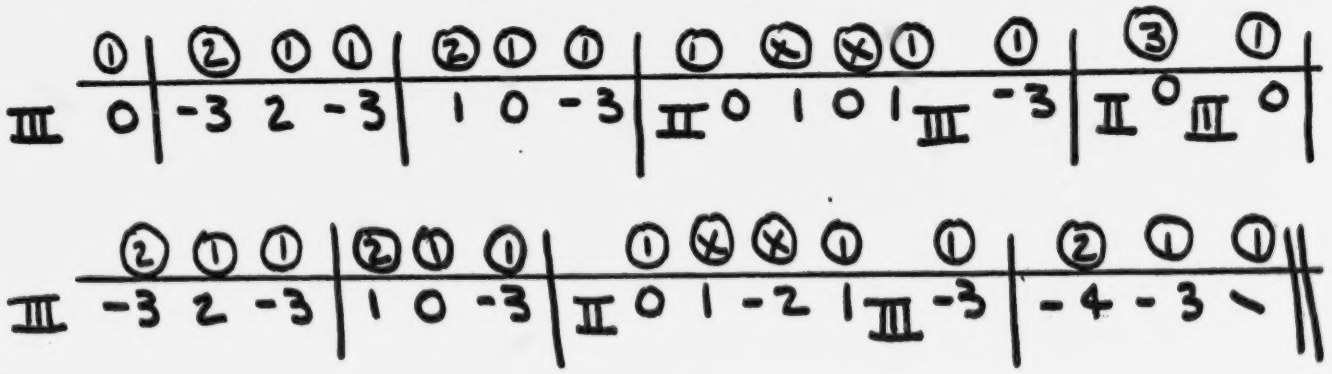
B. Conventional Notation for BARCAROLLE from "HOFFMAN" - Offenbach (violin).

Numerical Notation for BARCAROLLE from "HOFFMAN" - Offenbach (violin).



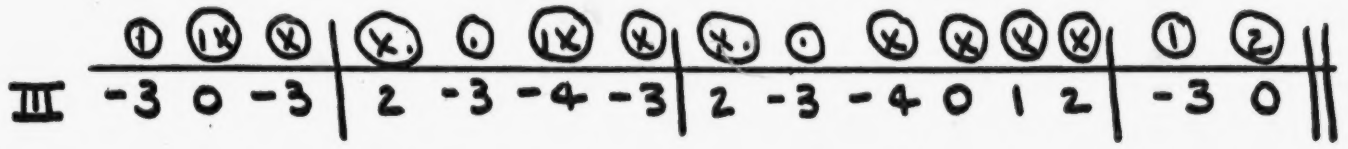
C. Conventional Notation for theme from Symphony No. 1 (final movement) - Brahms (viola).

Numerical Notation for theme from Symphony No. 1 (final movement) - Brahms (viola).



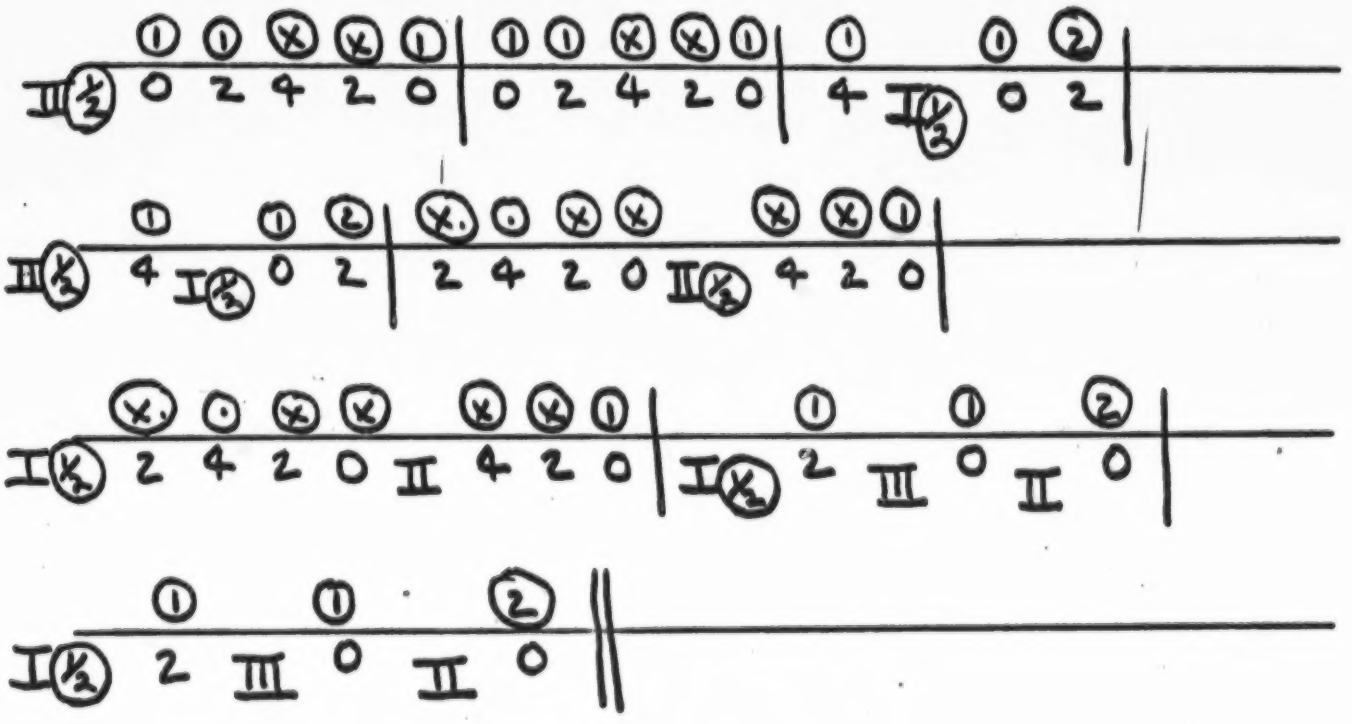
D. Conventional Notation for Theme from "Unfinished Symphony" - Schubert ('cello).

Numerical Notation for Theme from "Unfinished Symphony - Schubert ('cello).



E. Conventional Notation for Theme from Symphony No. 1 (third movement) - Mahler (bass).

Numerical Notation for Theme from Symphony No. 1 (third movement) - Mahler (bass).



APPENDIX (cont'd)

Page 32 - Letters from parents of Project children.

"I personally observed the program last summer, and thought it was very successful in teaching as well as motivating young children in the area of string music. Reactions from parents indicated a real desire for the program to continue".

Edsel Vergin
Superintendent of Schools
La Crosse, Wisconsin

"My husband and I wish to be counted among the enthusiastic supporters of future string projects to be held in La Crosse.

"Our son, Tom, was fortunate to be among those chosen for last summer's project. The experience has been pure joy mixed with hard work. Tom loves his violin, and has felt the pride of accomplishment along with the development of a greater sensitivity to music of all kinds.

"The value of the project has touched many people: the young musicians, their families and friends, and even casual observers. La Crosse is fortunate to have a man such as William Yarborough, who gives of himself and his talent to further the development of the young.

"Music is a vital element in the field of human enrichment. In this day of computors and technology, we need an increased sense of the nobility of man. What more important work could there be than that of Professor Yarborough and others like him."

Don Ellingson

"I am writing this letter to tell you what a thrilling and musically educational program the String Project was; particularly for our son, Chris, and in fact for the whole family.

"I don't really know where to start; there is so much to say. A program like this is unique and to the best of my knowledge unsurpassed by any other program like it. The children are not just starting an instrument; they are conditioned both physically and mentally, by people who care, with love, patience and devotion,

because they have such a concern for the great lack of good string players in our country. Not only are the children conditioned, but so are Mom and Dad. This makes it a family affair and we all work together.

"I could go on but I will not take any more of your time, except to tell you there are many people who are very grateful to Mr. Yarborough for his conception and initiation of this idea. I truly believe it is a program worth continuing.

"Chris may never be great, except to our ears, but we thank God and many people for the chance Chris has had. Thank you for your time."

Mr. & Mrs. George Brooks

"As a parent of one of the participants of last year's String Project conducted by Wisconsin State University at La Crosse, I am writing to you in support of a similar project for the summer of 1968. I understand that part of the funds for the project would have to be provided by the Board of Education, but I feel the tremendous foundation in string music that the program provided for these youngsters is well worth the expense.

"The workshop of last summer was conducted in a highly professional and educational manner with great benefits being given to each child. As of now, my daughter is playing in a string quartet at Emerson School and we are looking forward to many years of enjoyment with her in her musical endeavors. As a result of this initial program, two other children are highly interested in continuing music lessons."

Harold Erickson

"What a stimulating experience (the summer String Project) this is for them! How fortunate we are to have such foresighted people in our midst realizing the need to interest young children in these string instruments and assuring the future, hopefully, with symphony orchestra material this country needs so urgently. Think what it will do for our city junior and senior high school orchestras!

"As parents of a child who attended last year's program, we have nothing but praise for these efforts and we were delighted with the progress made during the three-week program and also through this year. It has stimulated his interest in this phase of music and I

doubt it would have occured otherwise. We would like to see this program continued for other children who show abilities so that they can benefit from the concentrated music study these talented interested people can give them. Mr. William Yarborough, the director of this program, is certainly one of these dedicated people and we share his enthusiasm."

Mr. and Mrs. Gerald Johnson

"We are parents of one of the children fortunate enough to have been picked for Professor Yarborough's experimental String Project last summer. The results of this training have been quite amazing. She is now playing the viola as well, or better, than students with two years training under the old method.

"We all realize that money is in short supply when it comes to schools. However, this is an excellent project and should be kept alive if at all possible. The short-term benefits may reach only a few, but the long-range benefits to the city and area could be large."

Anthony J. Silva

CHANGE OVER TO "CONVENTIONAL" NOTATION

Page 33 - Change-over to "conventional" notation.

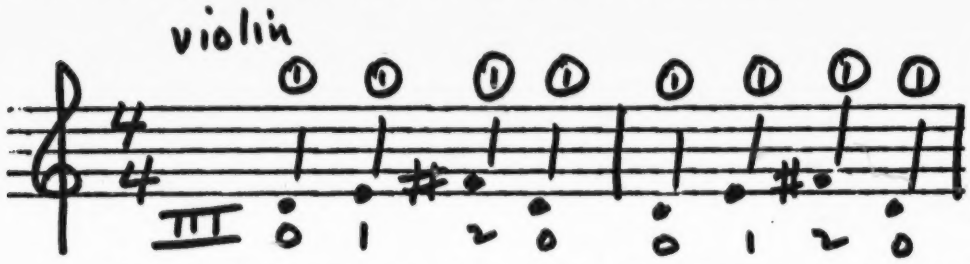
At the conclusion of approximately the sixth month of study, the average beginner should be secure enough to proceed to the change-over from the "numerical" method of notation to the "conventional" notation.

This process of teaching the reading of "conventional" notes, values, key signatures and time signatures is done gradually to permit easy transition.

First, the staff with quarter notes is used, the finger number written below each note. The child reads the numbers and then

relates the numbers to the notes. Gradually the numbers are eliminated above the notes. Still no mention is made of note names. Accidentals are written before each note, not at the beginning of the staff when the change-over is initiated. Thus, the first step would be:

Next, the child is confronted with rhythmic signatures. To the above, therefore, this would be added:



The usual explanation that the upper number of the rhythmic signature (the upper 4 in 4/4) indicates the beats per measure and the lower number, the basic note value, will suffice.

Then note values are brought onto the scene. The quarter note, or basic value, has been established. Other note values are used on the staff, with the circled rhythmic value placed above, thus:

Violin

Now, the IV and the minuses and pluses are then removed, and the rhythmic value numbers (circled) are eliminated, leaving the notes and normal fingerings.

Finally sharps and flats are introduced into the signature, the teacher pointing out the note to which each sharp and flat relates.

APPENDIX (cont'd)

Notice that up to this time, no concentrated effort has been made to teach names of notes. All recognition has come through relationship of string finger to placement of the notes on the staff. Now note names can be gradually included in the musical vernacular. Too, specific referral to a note as a quarter note, a half note, etc. is made.

Obviously, it is preferable to employ key signatures with sharps, starting with one sharp, in the violins and violas; and with flats, starting with one or two flats in the bass.

SPECIAL NOTE: A 16mm, 26-minute silent film (black and white) taken during the initial three-week project period in June 1967, is available on loan from the Audio-Visual Department of Wisconsin State University - La Crosse.